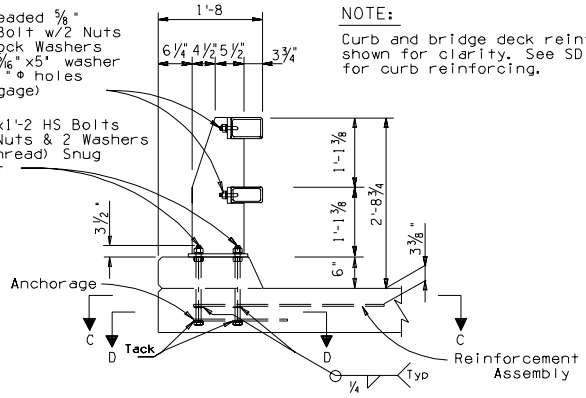


F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				

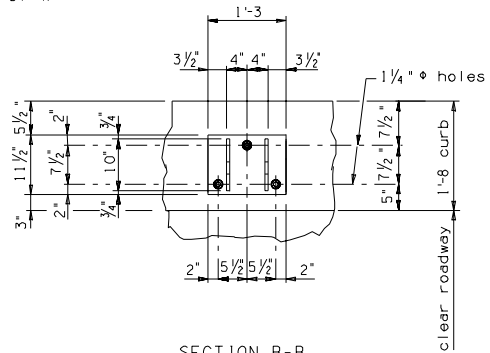
1-Threaded  $\frac{3}{8}$ " Rail Bolt w/2 Nuts & 2 Lock Washers  
 1-2" x  $\frac{3}{8}$ " x 5" washer w/2- $\frac{1}{8}$ "  $\phi$  holes (3  $\frac{1}{2}$ " gage)

$\frac{7}{8}$ "  $\phi$  x 1'-2 HS Bolts w/2 Nuts & 2 Washers (5" Thread) Snug Tight

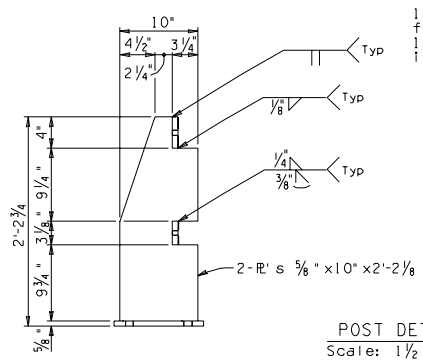
NOTE:  
 Curb and bridge deck reinforcement not shown for clarity. See SD 1.06(4 of 4) for curb reinforcing.



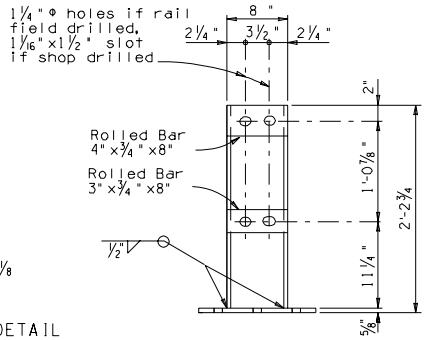
SECTION A-A  
 Scale: 1"=1'-0



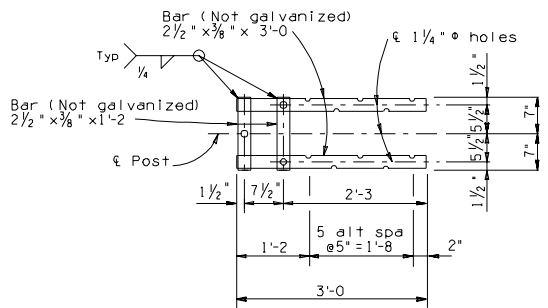
SECTION B-B  
 Scale: 1"=1'-0



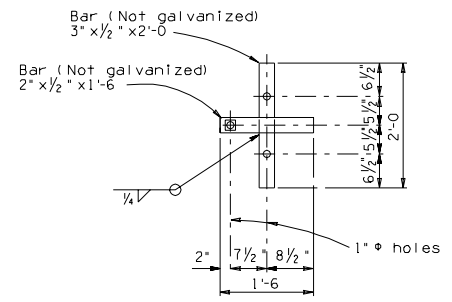
POST DETAIL  
 Scale: 1 1/2"=1'-0



RAIL BOLT DETAIL



SECTION C-C (Showing Reinforcement Assembly)  
 Scale: 1"=1'-0



SECTION D-D (Showing Anchorage)  
 Scale: 1"=1'-0

### INSTALLATION NOTES:

- Venting and pick-up holes in rails and sleeves shall be shown on fabricator's shop plans.
- Anchor bolts may be tack welded to anchorage. (Shop or field.)
- All rough edges on posts and rails shall be ground smooth.
- Post base (E's) shall be flat after fabrication.
- Rails shall not be shop spliced.
- Railing posts shall be in place and in proper alignment prior to placement of curb.
- Rails shall be shop or field drilled  $\frac{1}{4}$ " to receive rail bolts.
- After installation of rail, the exposed rail bolt threads shall be painted with two coats of zinc rich paint conforming to the requirements of ADOT Standard Specifications for Road and Bridge Construction.
- Slots may be omitted in standard sleeves where bolts are required on one side of splice only.
- In the areas indicated on the Bridge Drawings requiring an expansion splice, the expansion splice shall be located in the railing panel which passes over the bridge expansion joint.
- Either top or bottom rail in standard splice terminal section may be the longer rail.
- In rehabilitation work, railing that cannot feasibly be made continuous over a minimum of two posts shall be provided with a double-bolted splice.
- Not more than one splice shall be permitted per side of post except at expansion splices.

DESIGN APPROVED <i>Shafiq H. Hasan</i>		ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION <b>BRIDGE GROUP STRUCTURE DETAIL</b>	
APPROVED FOR DISTRIBUTION <i>Johnnie Davis</i>		TWO TUBE BRIDGE RAIL	
ROUTE	LOCATION	DRAWING NO. SD 1.06(2 of 4)	
TRACS NO.		OF	